

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new traffic control signal at the intersection of MD 256 (Deale Rd/Churchton Rd.) and MD 258 (Bay Front Rd) in Anne Arundel County, Maryland. MD 256 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA five (5) phase, full-traffic-actuated mode. There will be an exclusive/permissive left turn phase for the northbound movement of MD 256. The MD 256 through movements will operate concurrently. The MD 258 movement will operate alone. The commercial exit across from MD 258 will receive a "STEADY RED" indication at all times except when MD 258 has a "GREEN" indication at which time they will receive a "FLASHING RED" indication.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, and two 4-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

EQUIPMENT LIST

A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel mast arm, pole with 70 ft. mast arm [Note: four 2 in. x 90 in. anchor bolts].
1	EA	818	15 ft. steel pedestal pole with break away transformer base [Note: four 1 in. x 40 in. anchor bolts].
1	EA	816	Standard S.H.A. traffic signal controller, base mounted cabinet, and two 4-channel loop detector amplifiers [Note: Controller and cabinet shall be supplied by Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].
5	EA	814	12 in., one-way, three section (R,Y,G) black faced adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) black faced adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in./8 in., one-way, five section (12 in. YA,GA/8 in., R,Y,G) black faced adjustable signal head with post top mounting hardware and tunnel visors.
2	EA	814	8 in., one-way, two section (R,R) black faced adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	813	36 in. x 42 in. R 10-12 sign for mast arm mounting.
3	EA	813	48 in. x 48 in. W 3-3 "NEW" sign for ground mounting.
1	EA	813	16 in. x Var. D-3(1) Dual Faced sign for under mast arm mounting.
2	EA	813	30 in. x 30 in. R 5-1 sign for ground mounting.
1	EA	813	51 in. x 30 in. Associated Shield sign for pole mounting.
2	EA	813	51 in. x 30 in. Associated Shield Assembly sign for ground mounting
1	EA	806	250 W HPS lamp and luminaire.
1	EA	806	15 ft. luminaire arm.

B. Equipment to be furnished and/or installed by the Contractor.

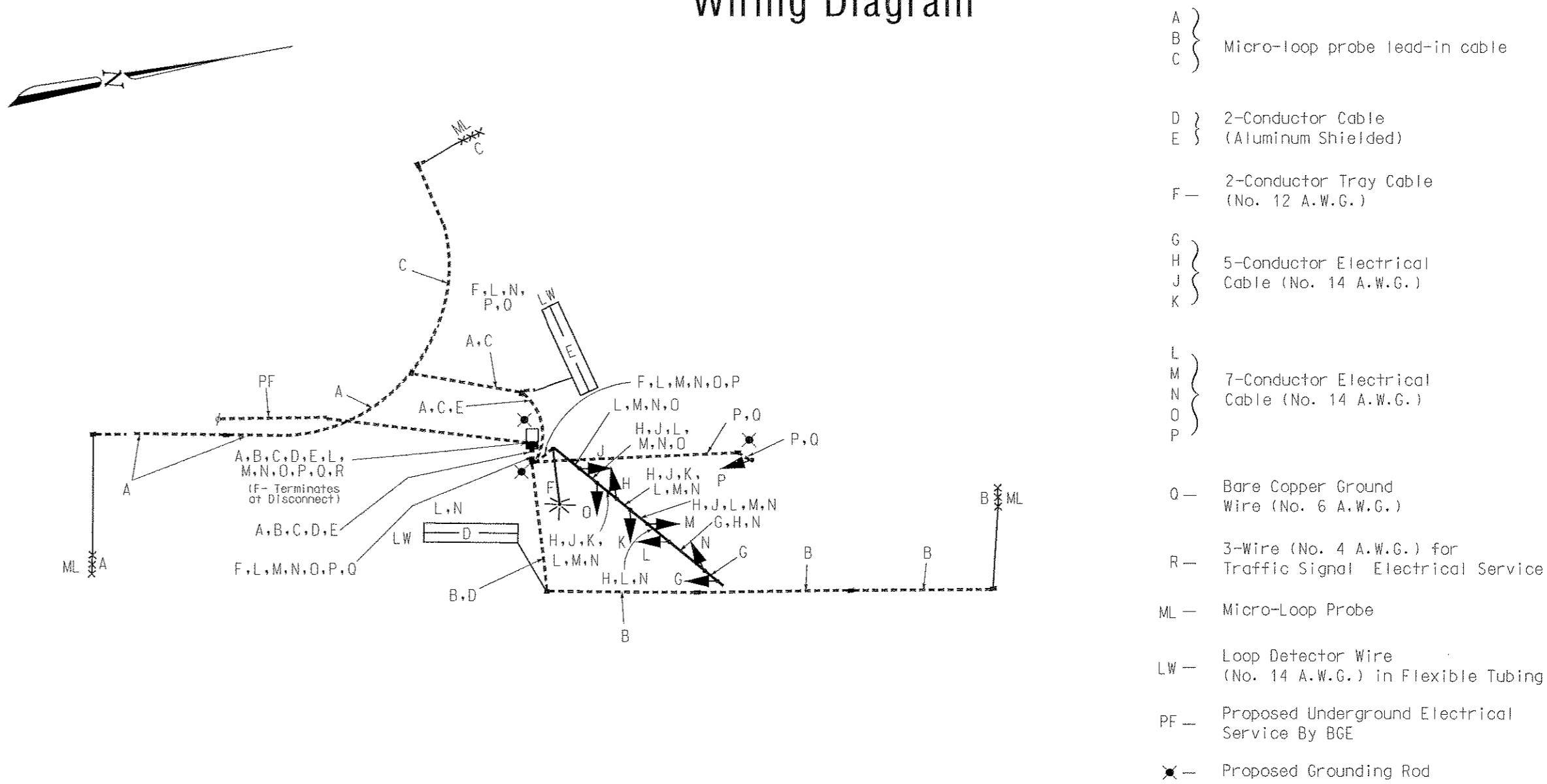
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
3	CY	205	Test pit excavation.
11	EA	811	Handhole.
3	EA	---	Micro-loop probe (set of 3) with 500 ft. lead-in cable.
350	LF	815	Sawcut for signal loop detector.
950	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
110	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
75	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
140	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
475	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
5	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
125	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
35	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
715	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
150	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
40	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
125	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
50	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
20	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
6.60	CY	805	Concrete foundation for traffic signal equipment.
3	EA	801	Ground rod 3/4 in. diameter x 10 ft. length.
1	EA	804	Control and distribution equipment (120/240 V, one phase, three wire system) for a type B-5 underground electrical service.
50	LF	556	24 in. wide HAPPTM - white for stop line.
25	LF	812	4 in. x 4 in. wood sign support.
170	LF	812	4 in. x 6 in. wood sign support.
Lump Sum	LS	---	As-built for S.H.A. [on CADD].

Phase Chart

	1	2	3	4	5	6	7	8	19
Phase 1 & 6	G	G	R	R	R	R	R	R	G
1 Change	G	G	R	R	R	R	R	R	G
Phase 2 & 6	G	G	G	G	R	R	R	R	G
2 & 6 Change	Y	Y	Y	Y	R	R	R	R	Y
Phase 4 & 8	R	R	R	R	G	G	FL/R	FL/R	R
4 & 8 Change	R	R	R	R	Y	Y	R	R	R
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/Y

Wiring Diagram



CONTACT LIST

The contact persons for District #5 are as follows:

Mr. Paul D. Armstrong
District Engineer
410-841-5450



Mr. Larry Elliott
Assistant District Engineer - Traffic
410-841-1003

Mr. John Mays
Assistant District Engineer - Utility
410-841-5450 Ext.30

Mr. Charles George
Assistant District Engineer - Maintenance
410-841-5461

Mr. Richard L. Doff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:
BGE
7317 Parkway Drive South
Hanover, Maryland 21076
1-410-859-9030

 <p>The Traffic Group The Traffic Group, Inc. 410-931-6600 Fax 410-931-6601</p>	APPROVALS		 <p>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION (General Information Plan) MD 256 (Deale Rd./ Churchton Rd.) at MD 258 (Bay Front Rd.)</p>				
	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION						
	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION						
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION						
	DIRECTOR, TRAFFIC & SAFETY						
DRAWN BY: Frank Hoeckel		F.A.P. NO. N/A		TS NO. 4021-GI		SHEET NO.	
CHECKED BY: [Signature]		S.H.A. NO. BW996M82		T.I.M.S. NO.		D-927	
SCALE: N/A		COUNTY: Anne Arundel		LOG MILE: 02025603.55		2 OF 2	
DATE: October 27, 2000							